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Test 1st Java.

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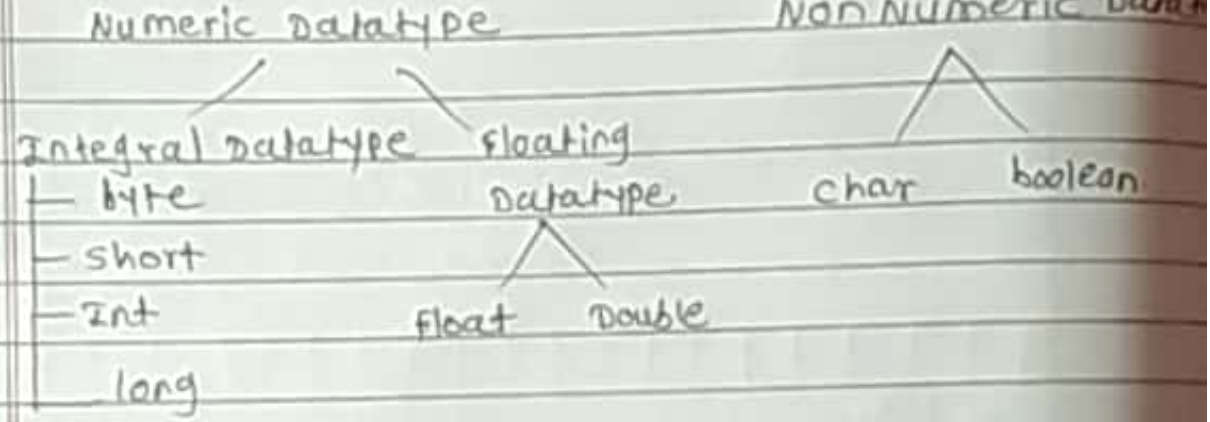
② what is Data type ? Explain in Details

→

There are 8 type Data type in Java Programming language.

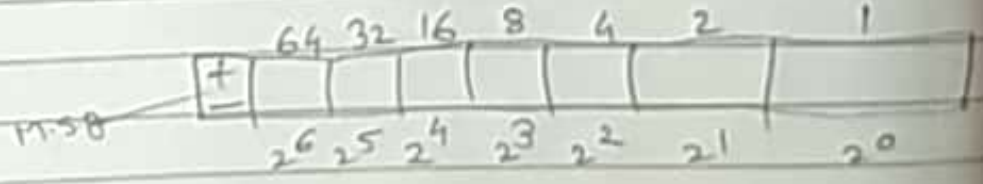
Primitive Data type.



Numeric Datatype (signed)

Non Numeric Datatype (unsigned)

① byte:- 1bit 1 bytes = 8 bits

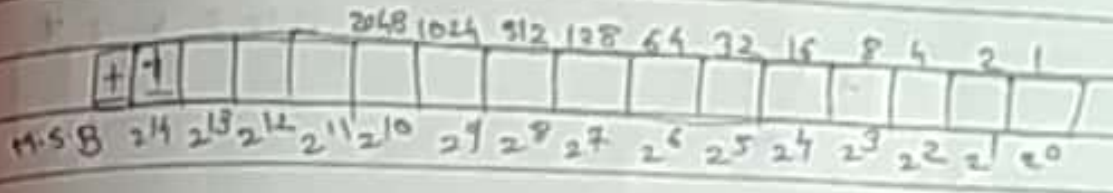


byte → Byte (wrapper class)

Byte.MAX_value = 127

Byte.MIN_value = -128

③ short 2 bytes = (16 bits)



short → Short (wrapper class)

Short.MAX-value = 32767
Short.MIN-value = -32768

④ Int 3 bytes = 24 bits.

Integer → Integer

Integer.MAX-value = 214748
Integer.MIN-value = -2147..

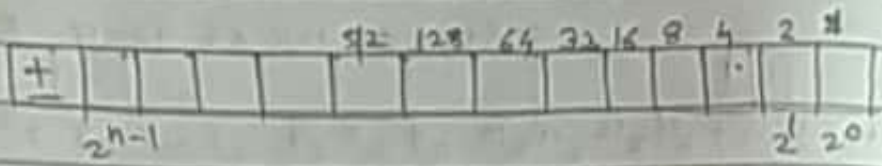
⑤ long 4 bytes = 32 bits.

long → Long (wrapper class)
Long.MAX-value = 92233 7
Long.MIN-value = -9223-

⑤ Float

Float → Float (wrapper class)

e.g. 20.1111111F



⑥ Double

double → Double.

e.g 23.12121212121212

Double.MAX-VALUE = 1.797693

Double.MIN-value = -1.7976.

⑦ char

char → character

e.g ABC

⑧ boolean

boolean → Boolean

e.g 1 = True

0 = False

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(1)
→

JDK :- (Java Development kit)
:- Develop and execute the Java Application
JRE :- Java Runtime Enviroment
To execute the Java Appln only.
Jvm :- Java Virtual Machine.

JDK :-

~~JRE~~ :- Javac
Convert Source code to Byte code

JRE :- Java (Development tools)
Byte code → dot file
Read only Machine Jvm.
Not Read women or machine only Read machine. windows or Linux operating System.

Jvm :- display the output.
Library class

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(2)

→ Compilation :- Javac
To execute ~~only~~ the Java Appln only

Execution :-
Run the Java Program.

eg.

```
class A
{
 System.out
  public static void main (String args[])
  {
  System.out.println(" Hello ....");
  }
  }
```

= Javac A.Java. (Compilation)

Java A (Execution)

Hello ....

Q)

The Input
- Userdefined Input
- user Access Input

```
import Java.util.scanner;
class A
{
public static void main (string args[])
{
Scanner so = scanner(System.in);
  int x,y,z;
  x=10;
  y=20;
  z=x+y;
System.out.println("sum is;"+z);
}
}
import Java.util.Scanner;
class B
{
public static void main(String args[])
{
Scanner so=new Scanner(System.in);
  int x,y,z;
System.out.println("Enter x value"+x);
  x0 = so.nextInt();
System.out.println("Enter y value"+y);
  y0 = so.nextInt();
```

```
z = x+y;
System.out.println("sum is :"+z);
    }
  }
```

⑦

→ For loop

(Initial value; Cond^n check cond^n ; Increment)

e.g.

```
class A
{
 public static void main(String args[])
 {
  int i,n;
 for(int i=1; i<=10 ,i++)
  {
 System.out.println(i);
   }
  }
 }
```

output

1
2
3
4
5
6
7
8
9
10

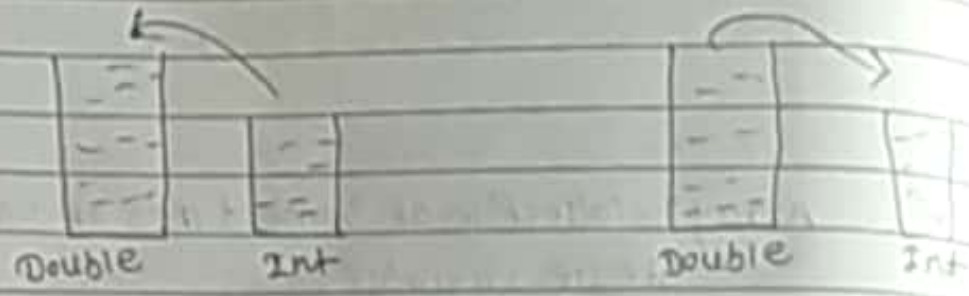
(A)

→ Array :- Collection of same types of values in single variable.

```
class A
{
public static void main(String args[])
{
 int sum=0;
int[][] x= {{1,2,3,4,5},{6,7,8,9,10}};
 for(int i=0; i<=1;i++)
 {
  System.out.println(" "+x[i][j]);
  sum= sum +x[i][j];
 }
 System.out.println("\n");
}
System.out.println("sum is :"+sum);
 }
 {
```

Type casting

Implicit Typecast	Explicit Typecast
① smaller to Bigger	① Bigger to small
② Done by compiler	② Done by prog
③ no loss of data	③ loss of Data



Implicit type casting.

left to Right

byte → short → Int → long → float → double

char

Explicit Type casting Right to left

byte ← short ← Int ← long ← float ← double

char